



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/461,416	12/16/1999	MARC DE BLOCK	2121-154P	3779

2292 7590 06/18/2002

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

[REDACTED] EXAMINER

KIZILKAYA, MICHELLE R

ART UNIT	PAPER NUMBER
1661	7

DATE MAILED: 06/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.  
09/461,416

Applicant(s)

De Block

Examiner  
Michelle Kizilkaya

Art Unit  
1661



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on Feb 4, 2002

2a)  This action is FINAL. 2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

4)  Claim(s) 24-37 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 24-37 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. 08/817,188.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1)  Notice of References Cited (PTO-892)

4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

6)  Other: \_\_\_\_\_

Art Unit: 1661

## **DETAILED ACTION**

### **Claim Rejections**

#### **35 U.S.C. § 103**

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the difference between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- A. Claims 24-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dodds et al. in view of Strack et al., Muller et al., Moldau, Uotila et al., Chen et al., or Masojidek, as cited in the previous Office Action (paper 5, pp. 2-4), and further in view of Smith et al.

The teachings of Dodds et al., Muller et al., Moldau, Uotila et al., Chen et al., and Masojidek are discussed in the previous Office Action. As applicants point out, the previously cited prior art does not provide a correlation between electron mitochondrial electron flow (i.e., respiration) and “agronomic fitness”. Smith et al, teaches that dark respiration rate is strongly correlated with plant growth rate (entire document - see, e.g. abstract).

Given the known correlation between respiration and plant growth rate, it would have been obvious for one of ordinary skill in the art to measure mitochondrial electron flow as described previously. One would have been motivated to do so, given the expectation that

Art Unit: 1661

resistance to stress factors in vitro would correlate with resistance in the field. Thus, this invention as a whole was clearly *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Applicant's arguments have been considered but are not persuasive in view of the new ground of rejection.

### **Conclusion**

No claims are allowed.

### **Note**

Applicant may want to consider amending the language in claim 24 as it currently appears applicant is suggesting a scientific comparison could be effectively conducted under varying control conditions. More specifically, "similar conditions" are less than adequate in laboratory testing.

Art Unit: 1661

**Future Correspondence**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Kizilkaya whose telephone number is (703) 308-4324.

If attempts to reach examiner by telephone prove to be unsuccessful, the examiner's supervisor, Mr. Bruce Campell, can be reached at (703) 308-4205.

Additionally, the USPTO customer service department can be reached by pressing zero in the examiner's automated voice mail box system.

Michelle Kizilkaya, mrk



BRUCE R. CAMPELL, PH.D  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600